

FIG. 1

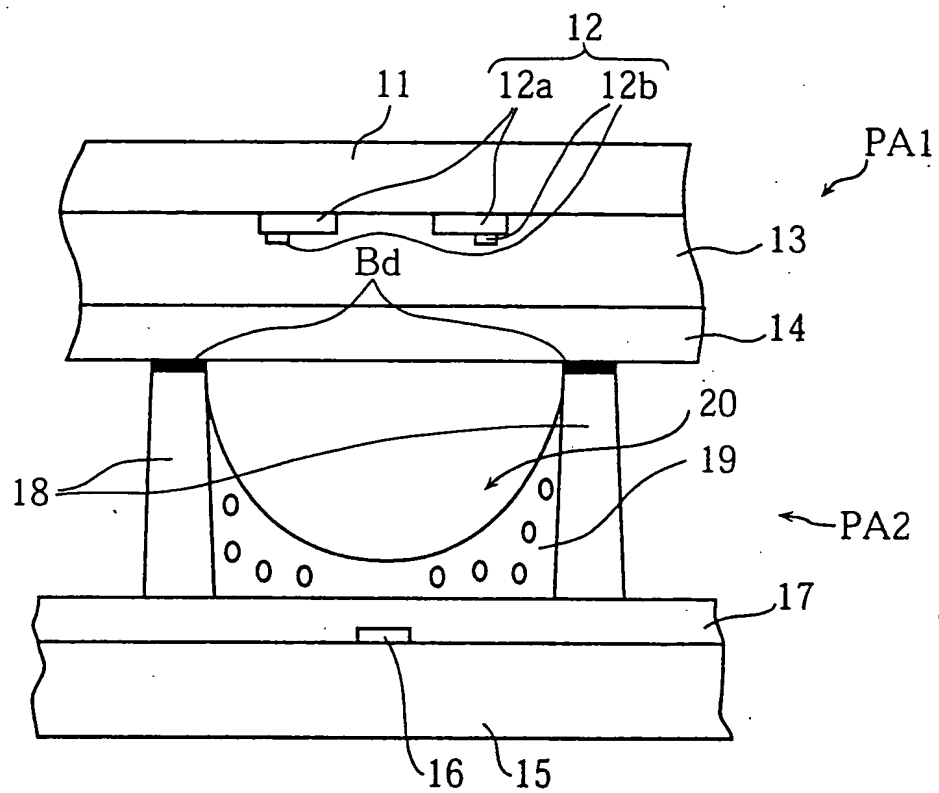


FIG. 2

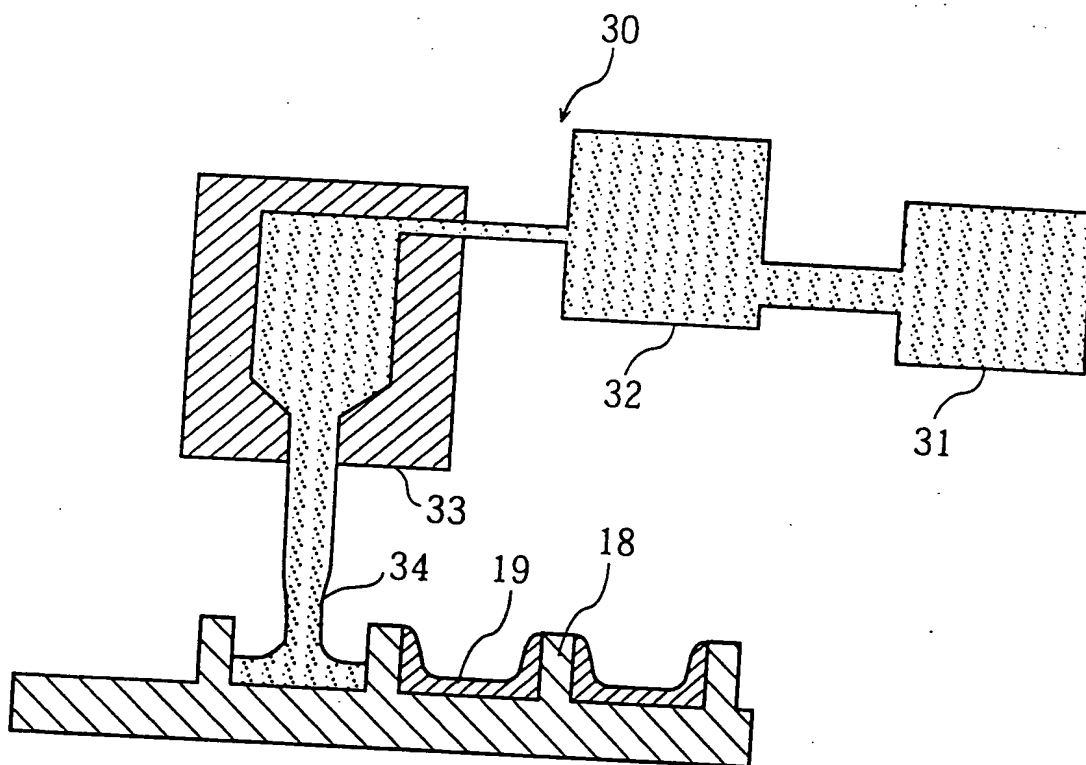


FIG. 3

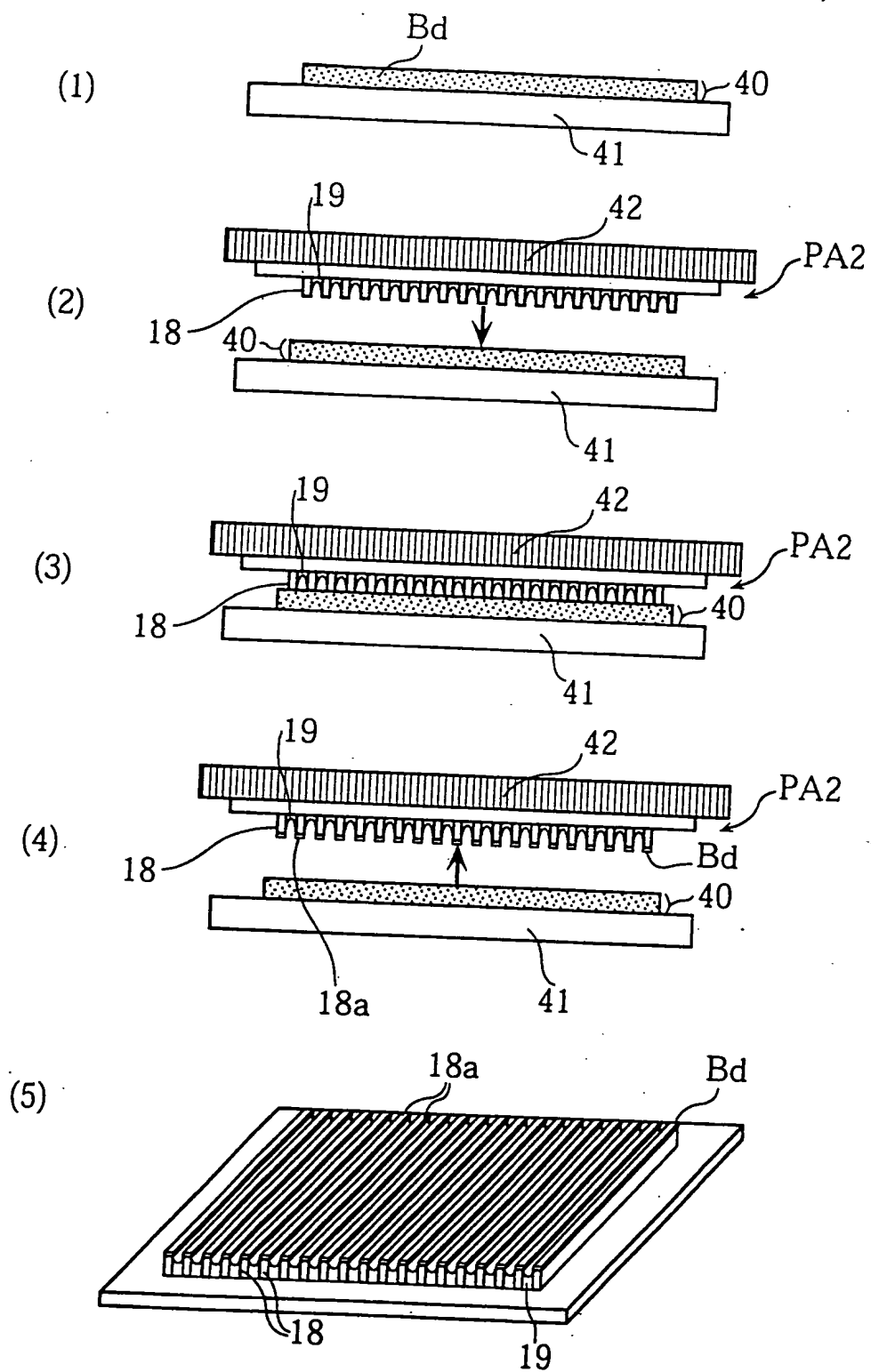


FIG. 4A

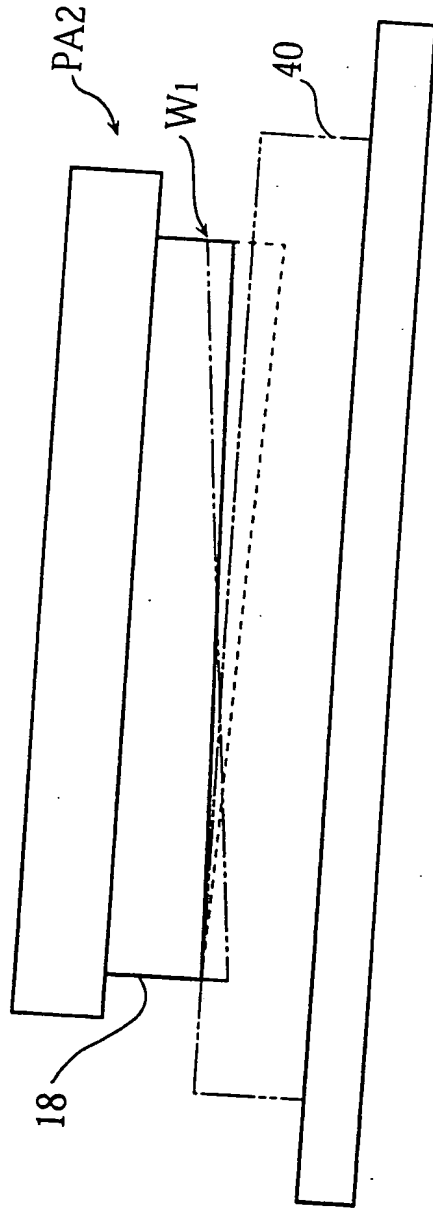


FIG. 4B

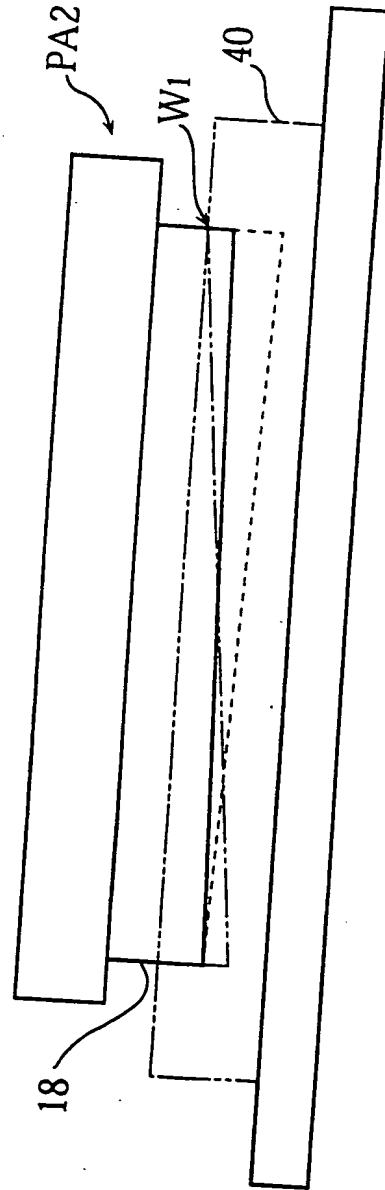


FIG. 5

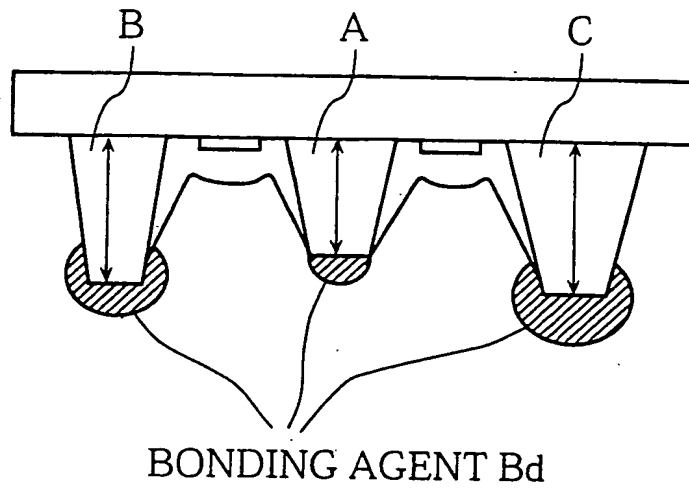


FIG. 6A

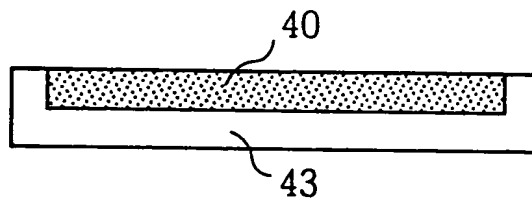


FIG. 6B

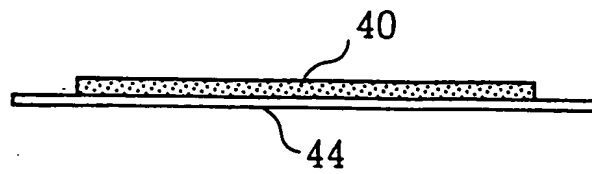


FIG. 7

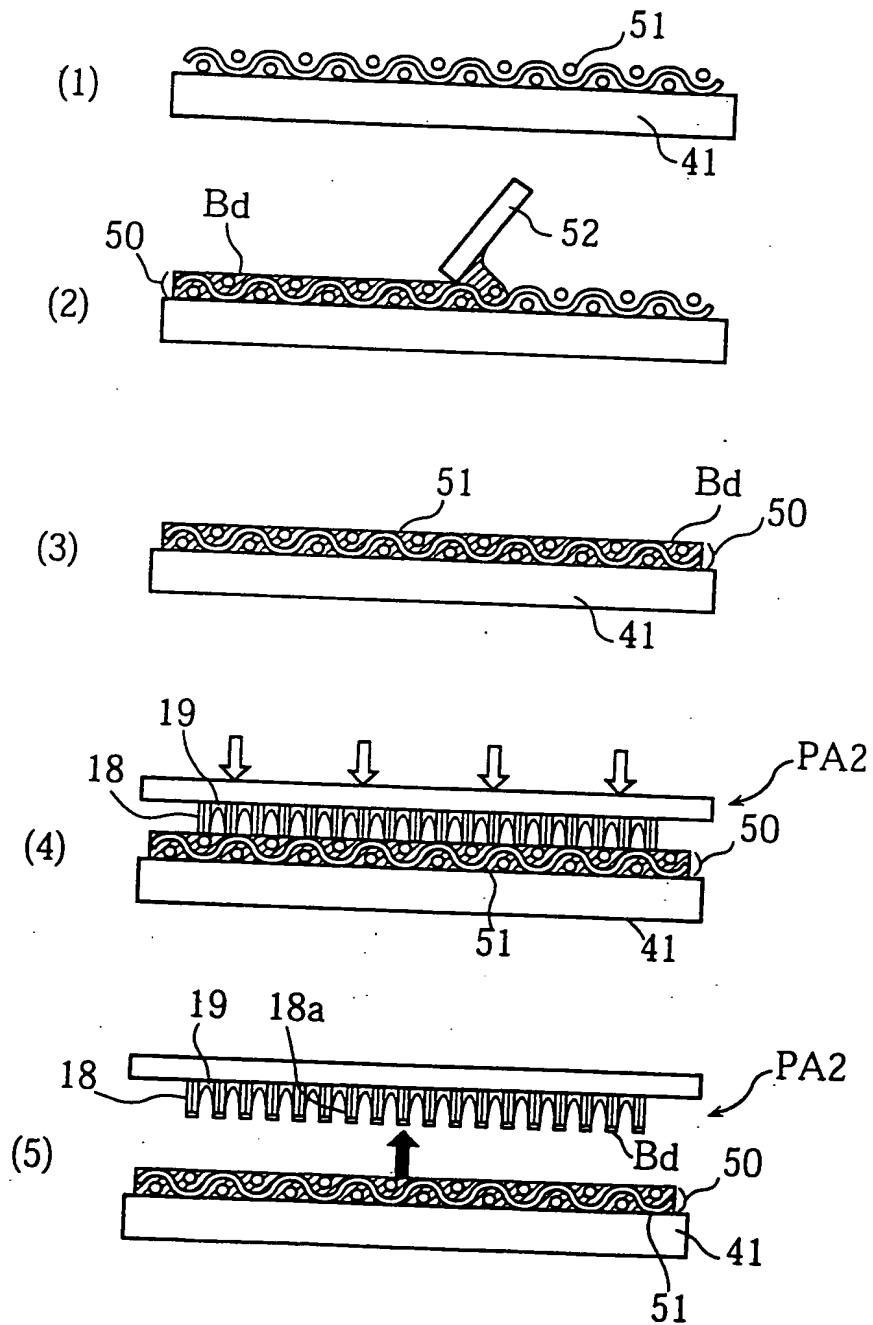


FIG. 8

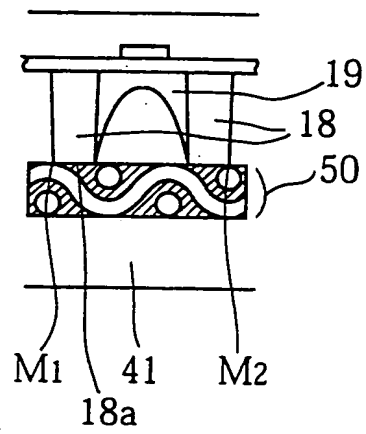


FIG. 9

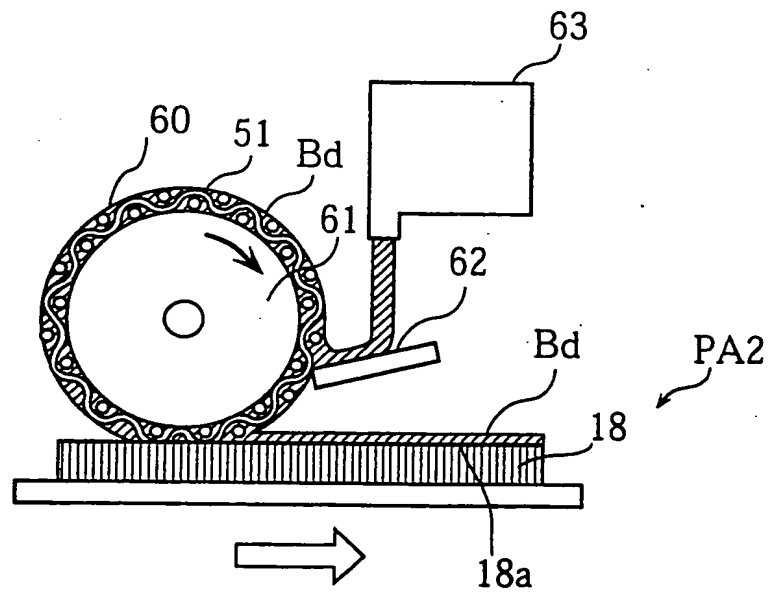


FIG. 10

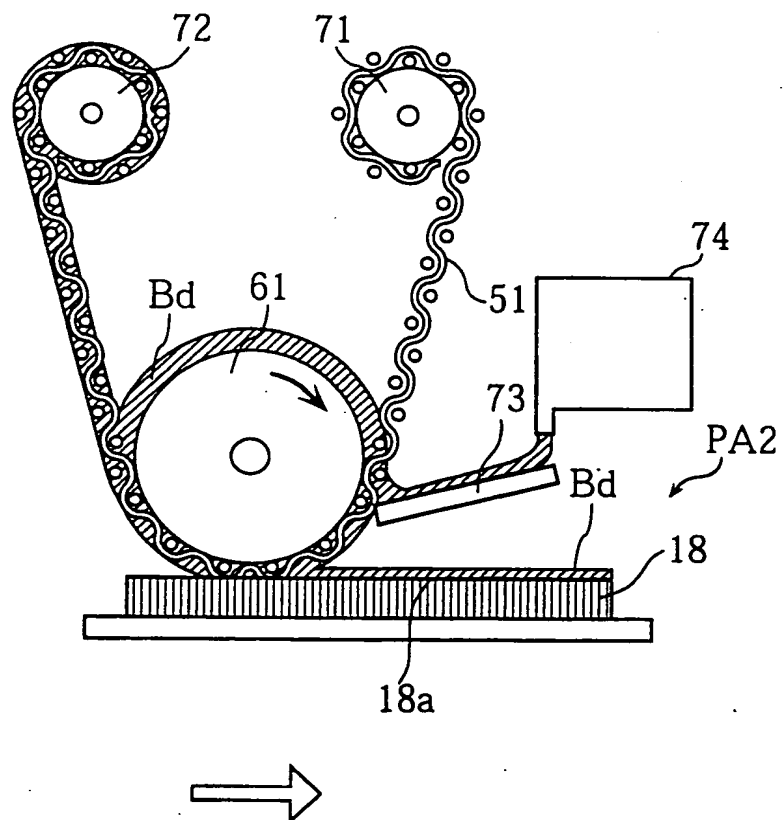




FIG. 11

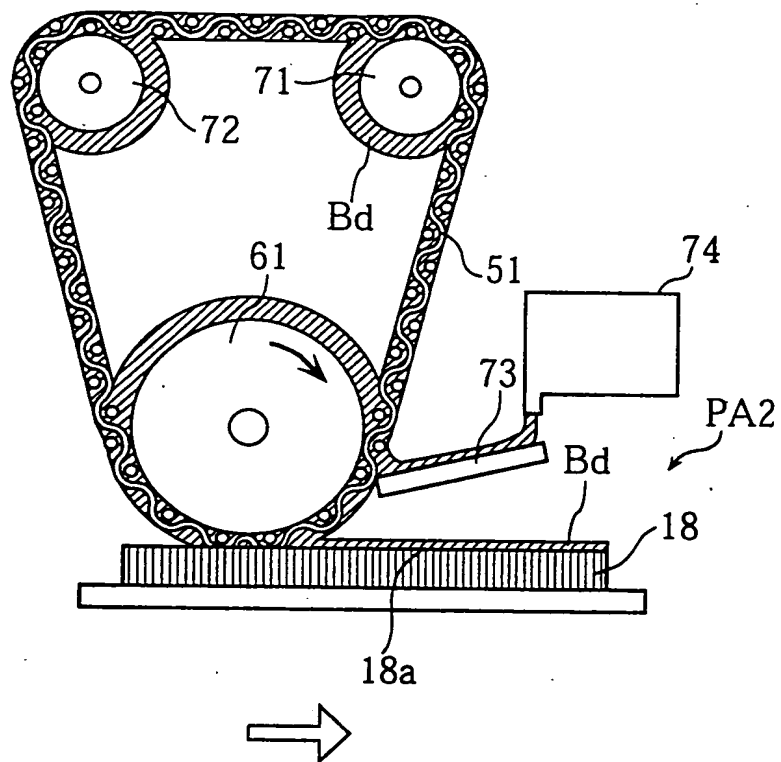


FIG. 12

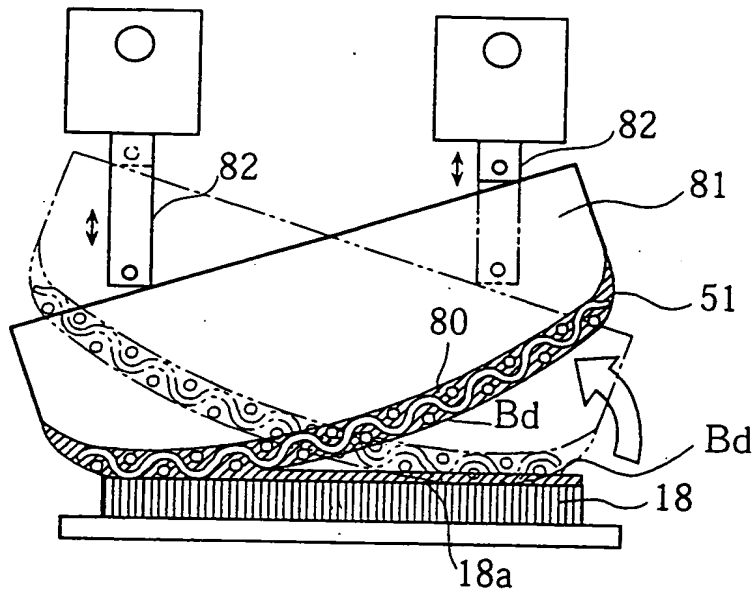
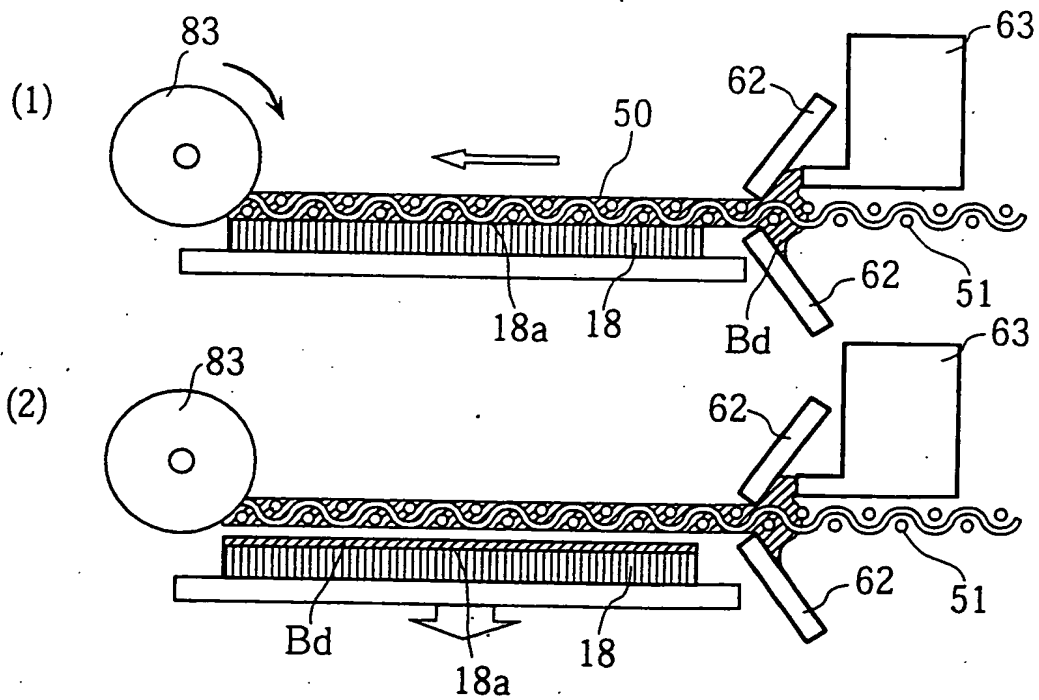


FIG. 13



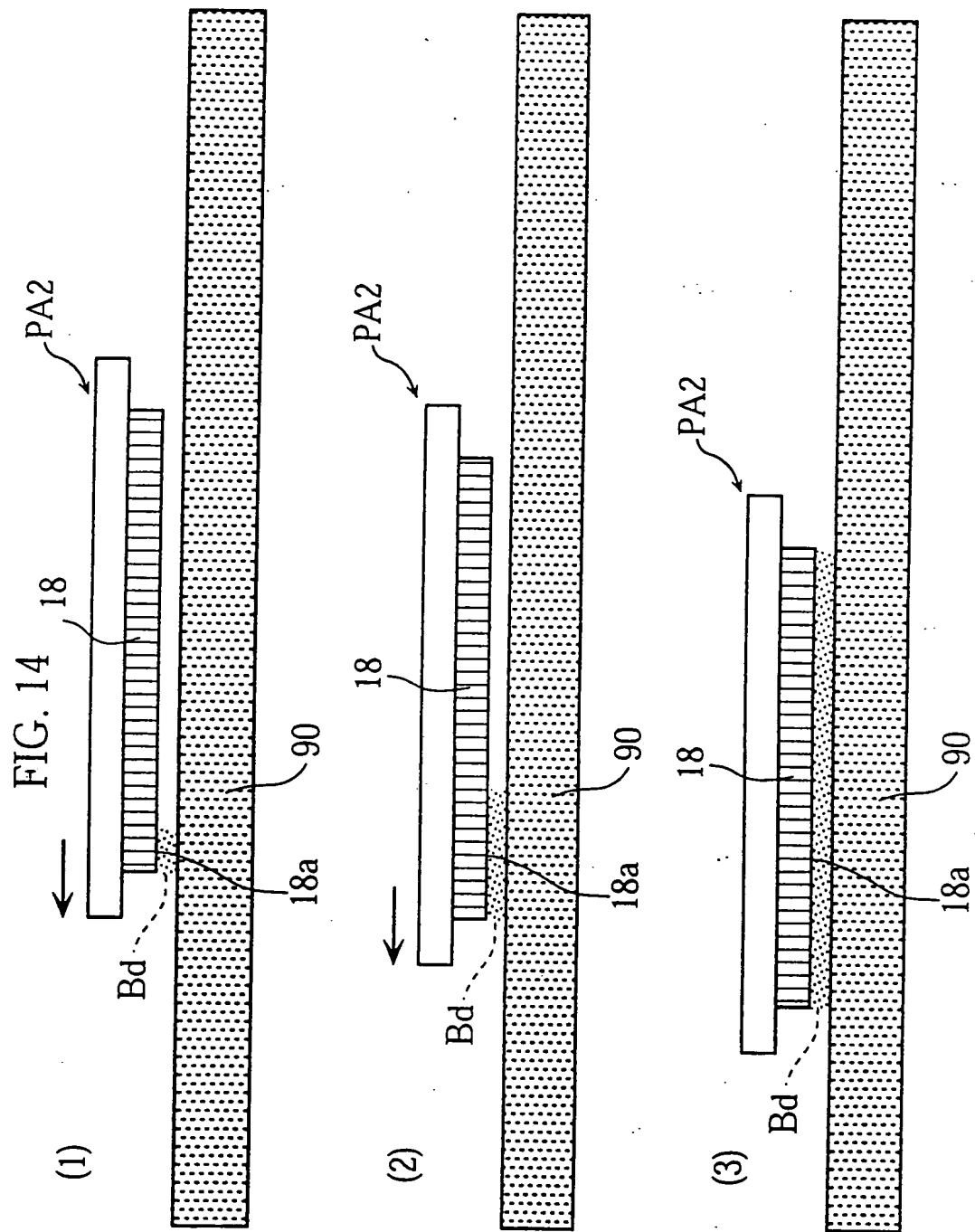


FIG. 15

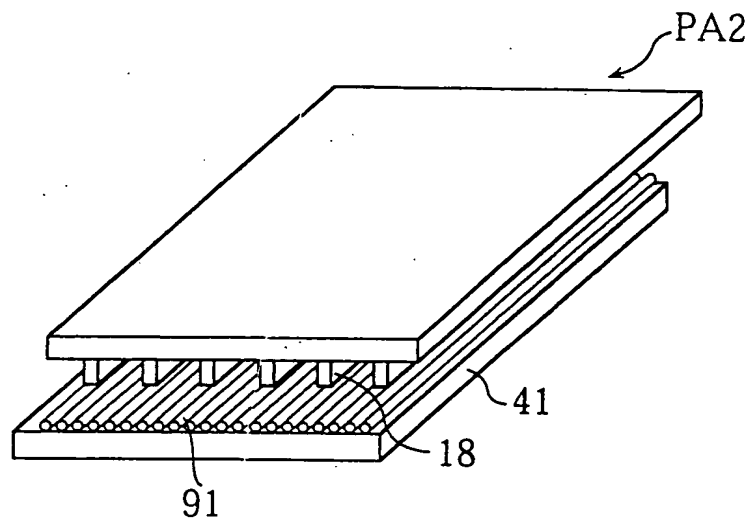


FIG. 16

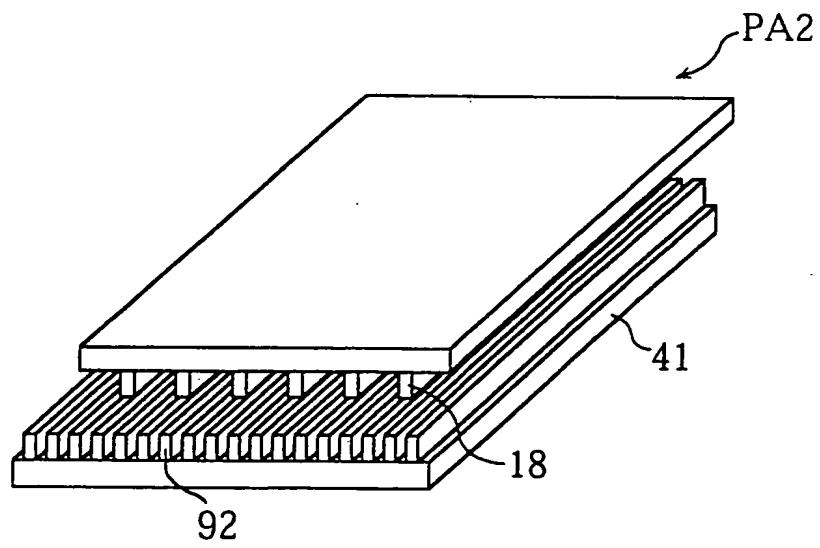


FIG. 17

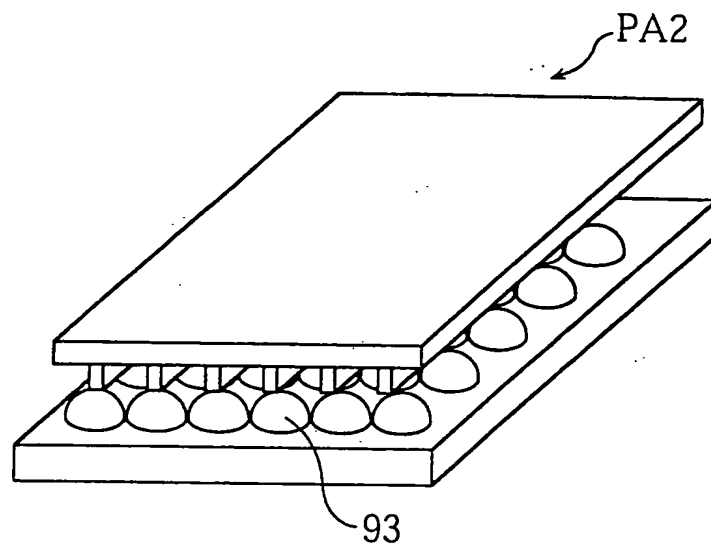


FIG. 18

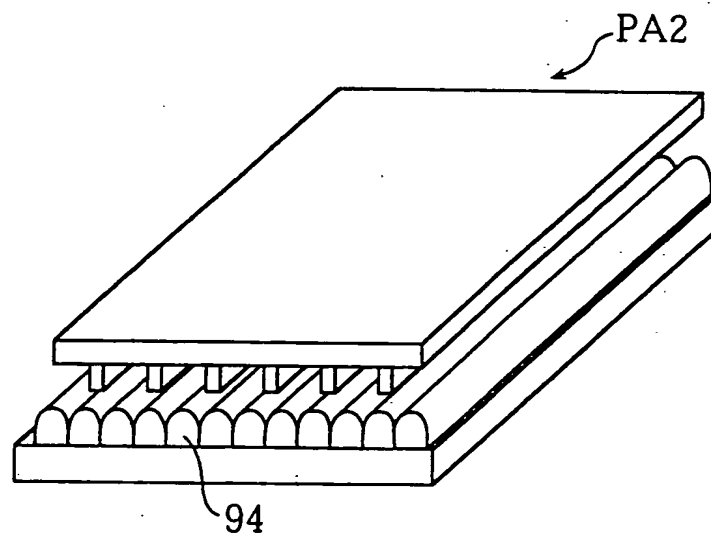


FIG. 19

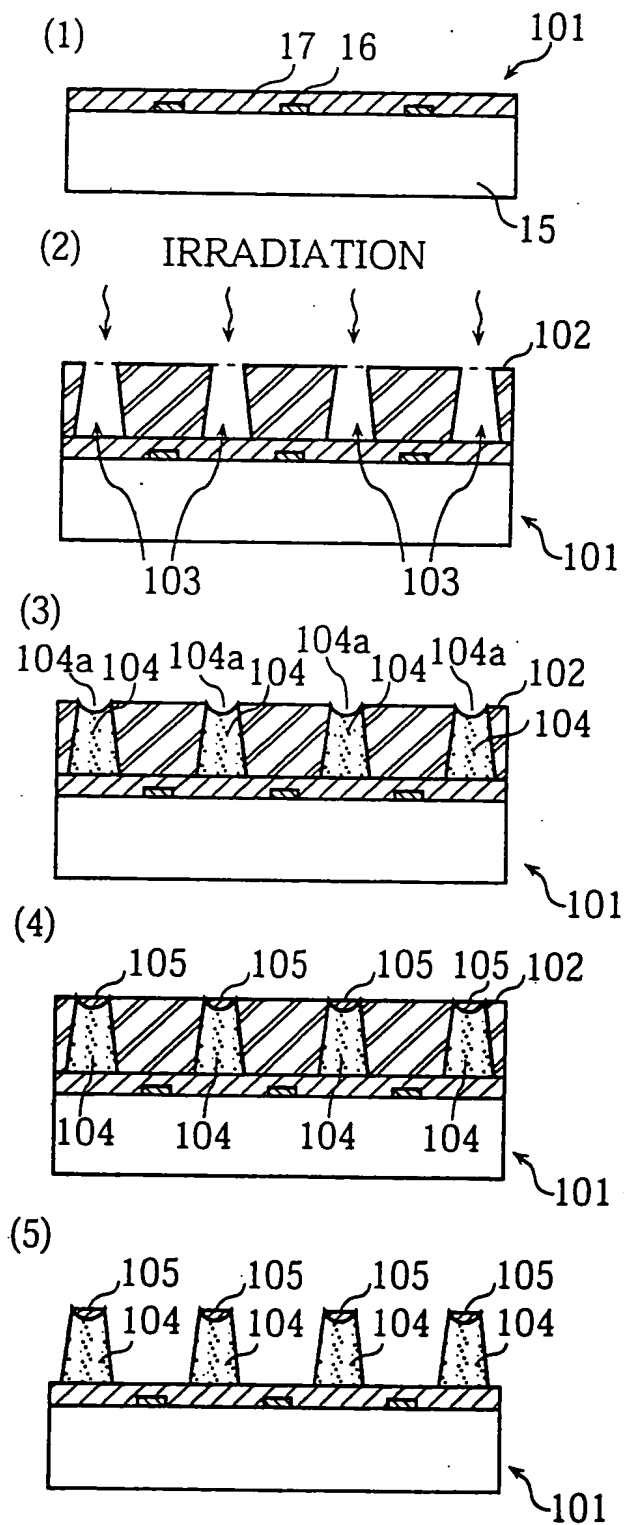


FIG. 20

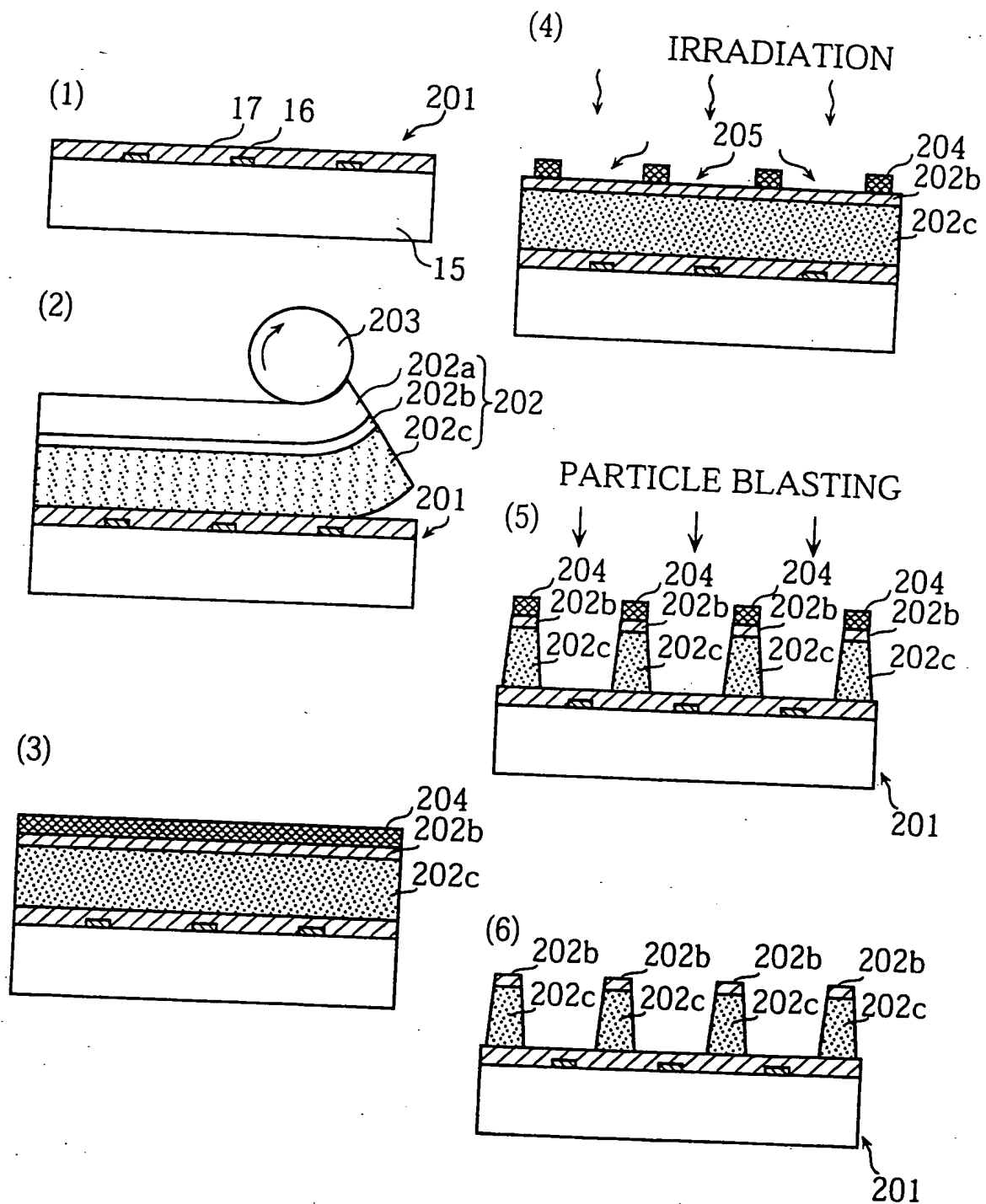


FIG. 21

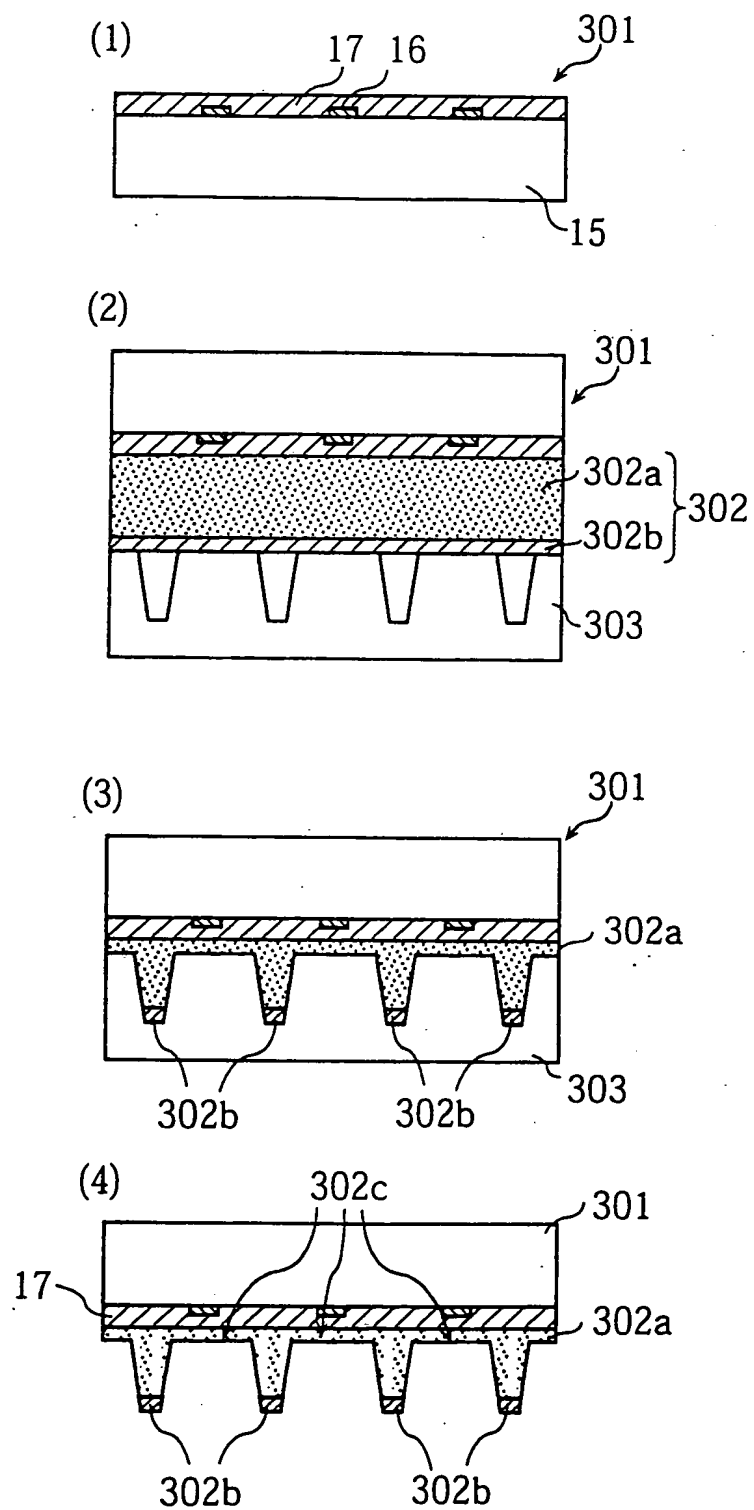




FIG. 22

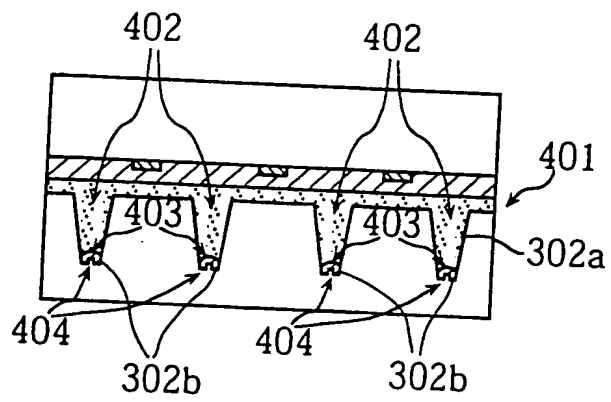


FIG. 23

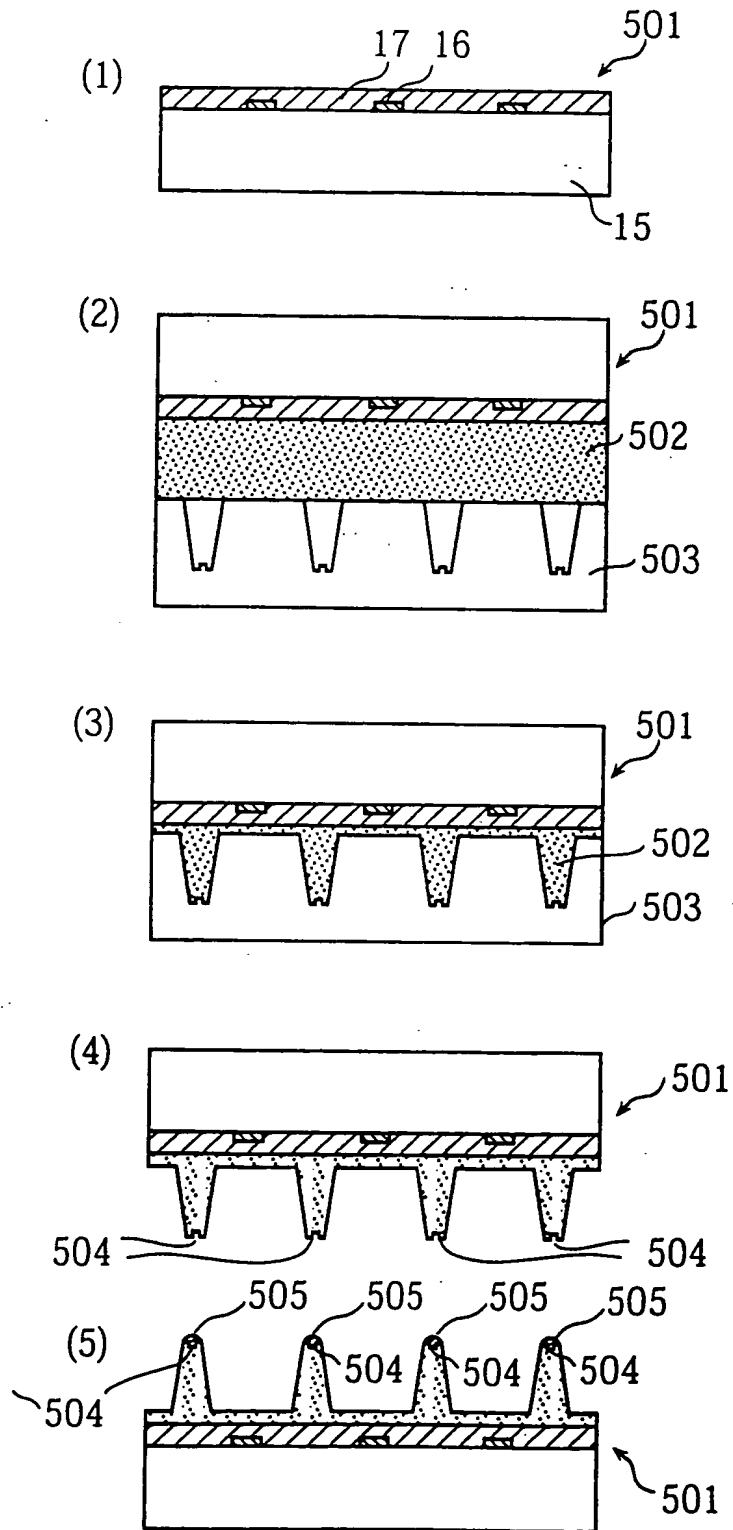


FIG. 24

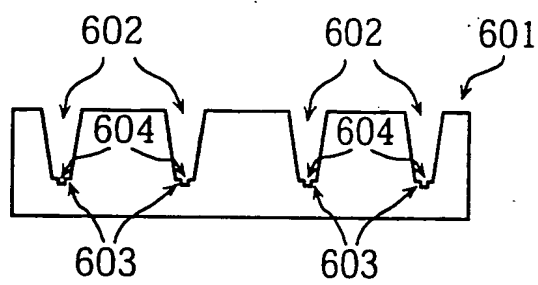


FIG. 25

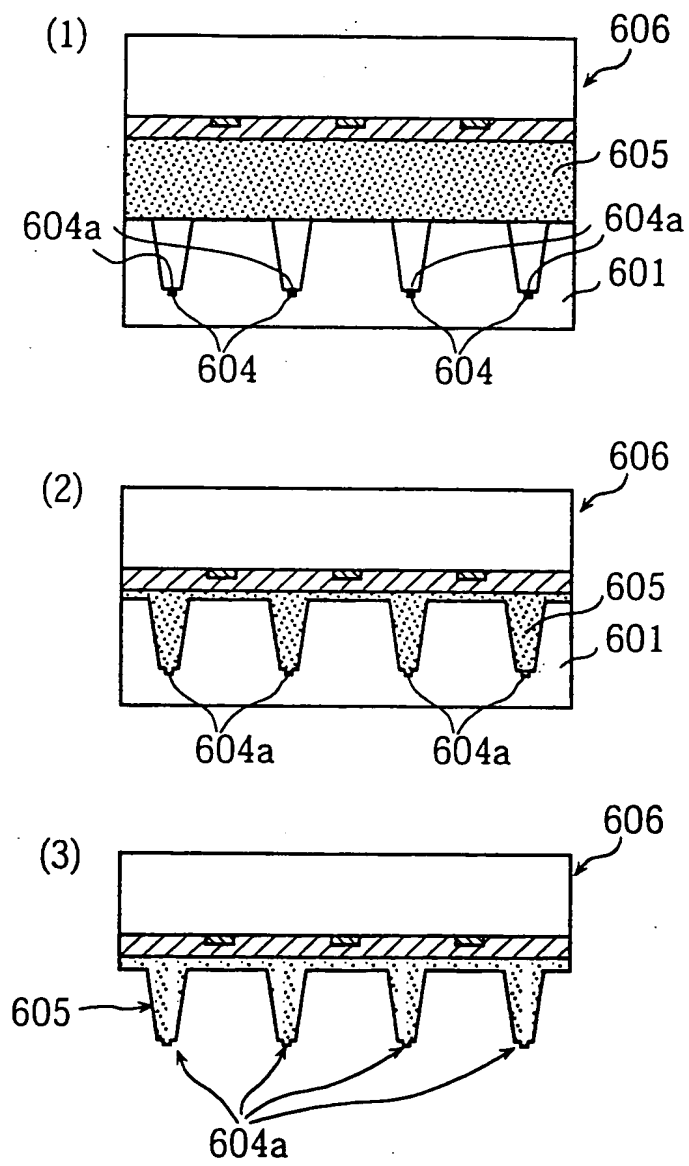


FIG. 26

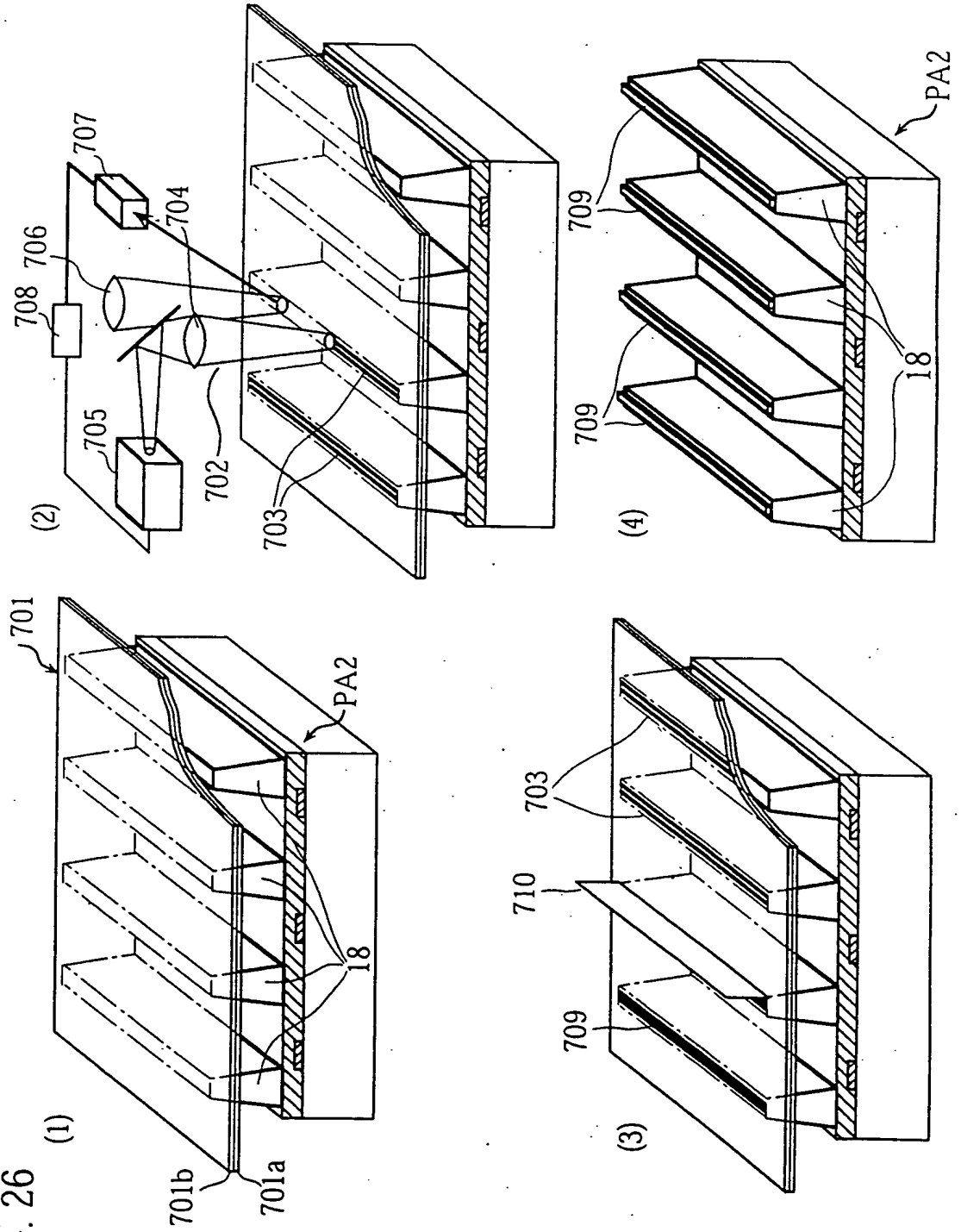


FIG. 27

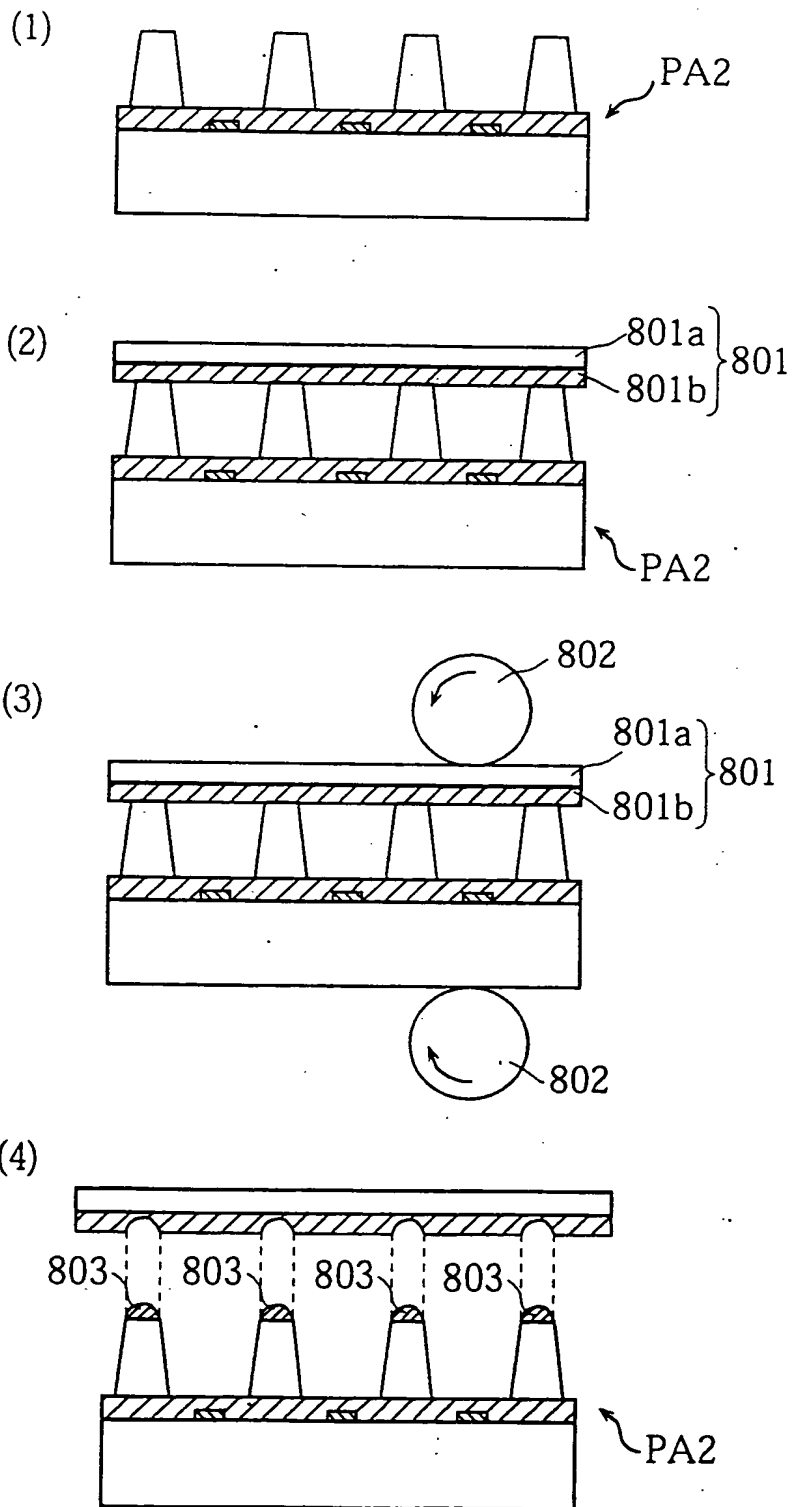


FIG. 28

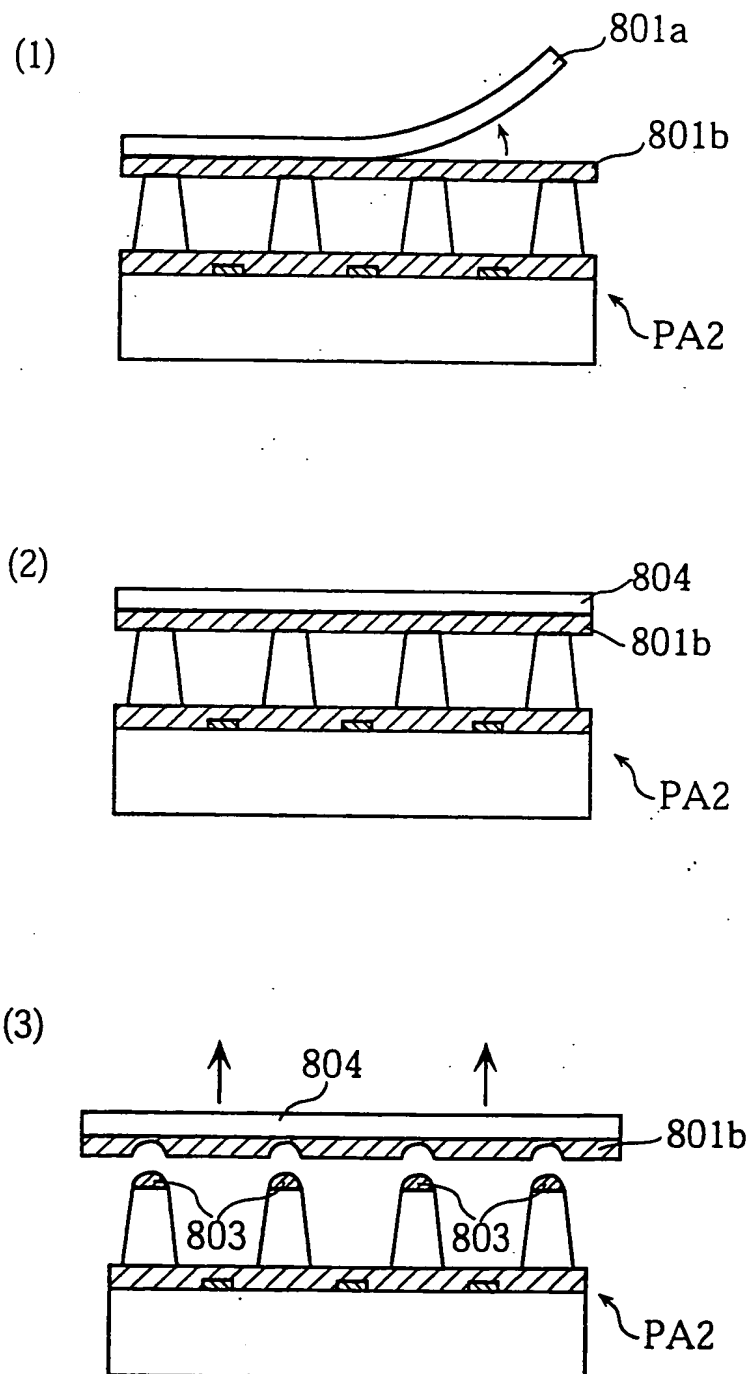


FIG. 29

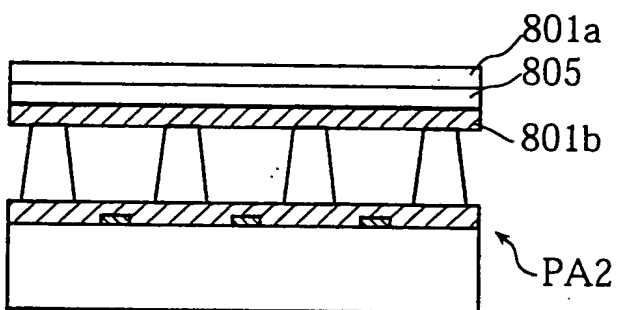




FIG. 30

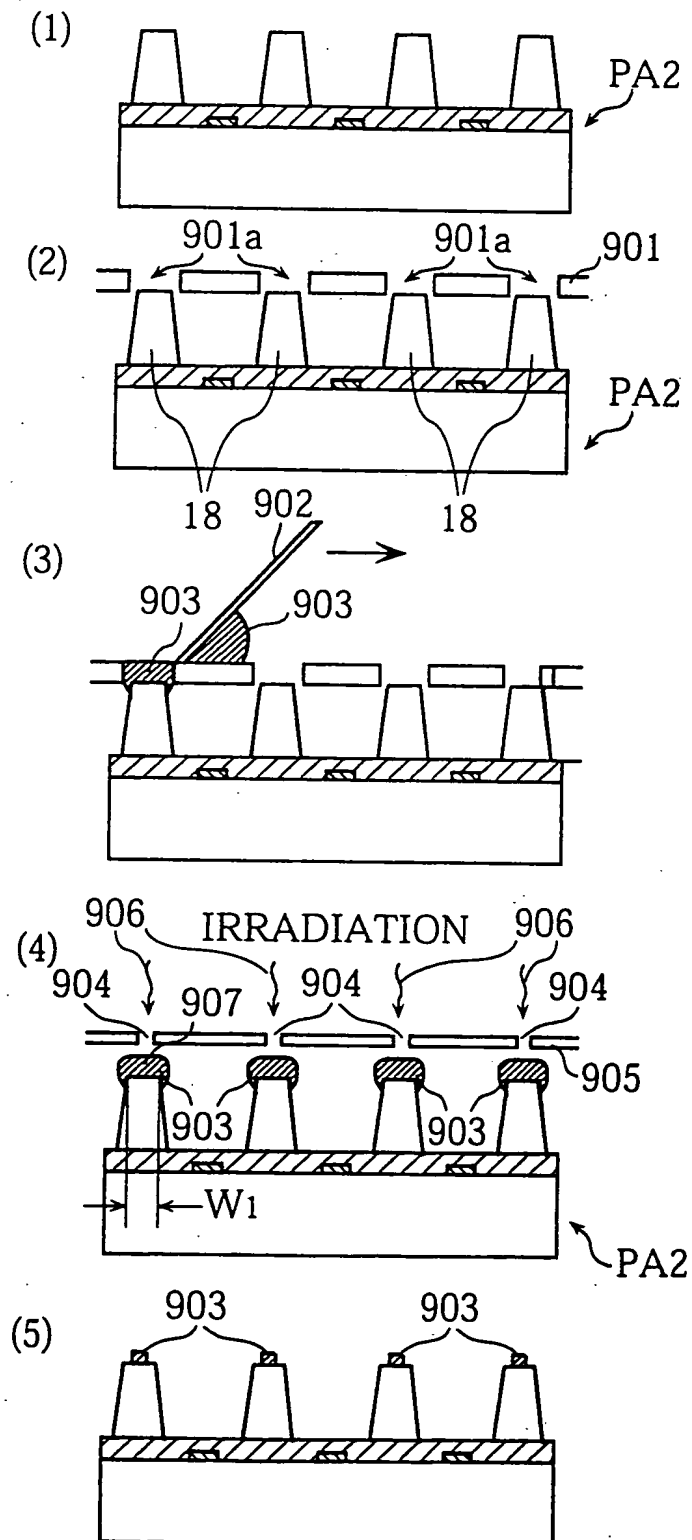


FIG. 31

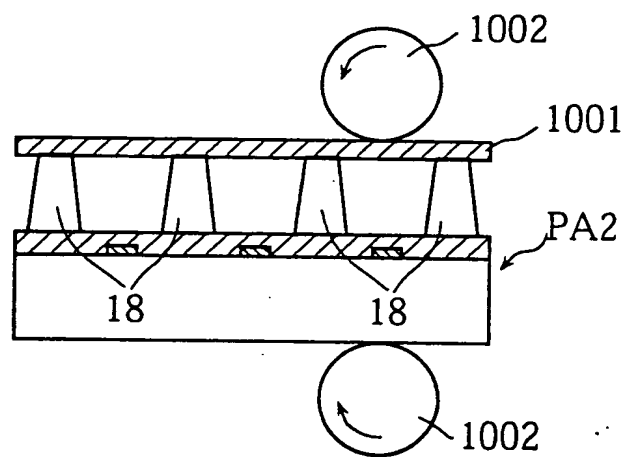


FIG. 32A

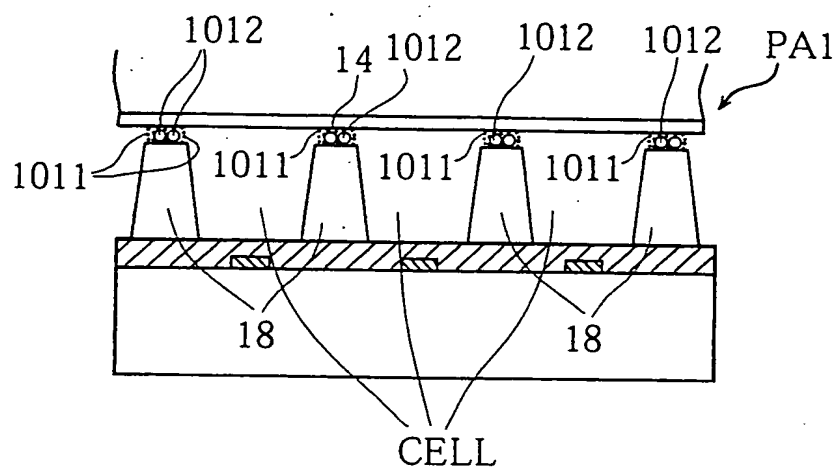


FIG. 32B

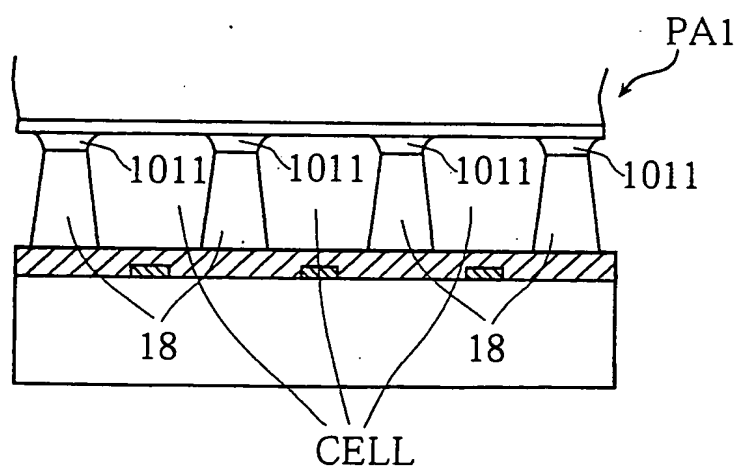


FIG. 33

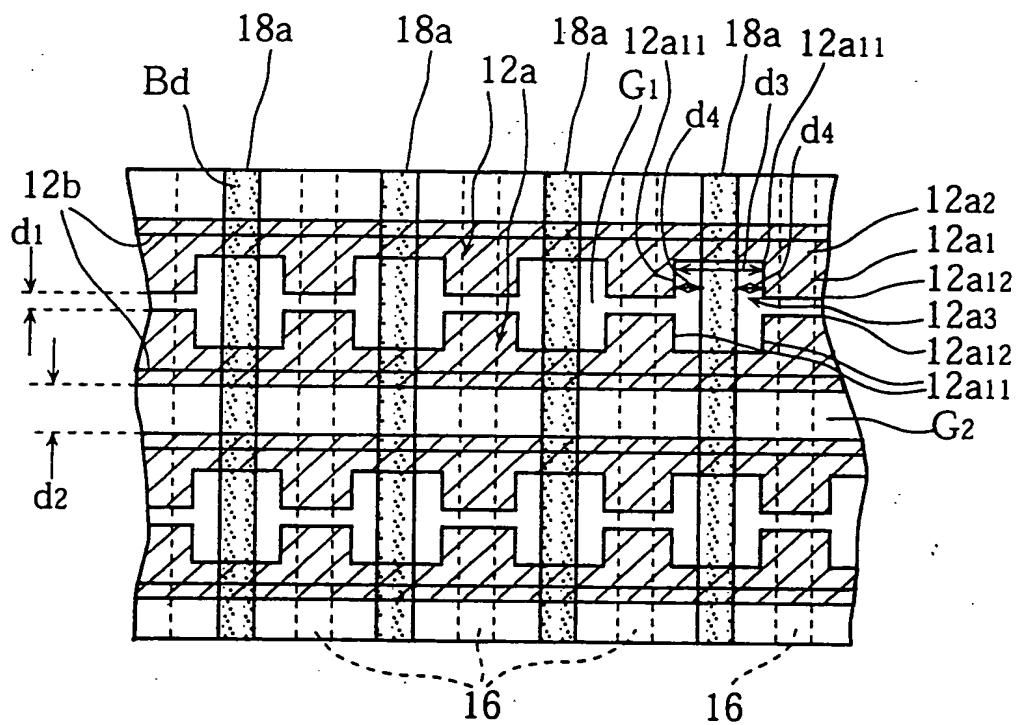




FIG. 35

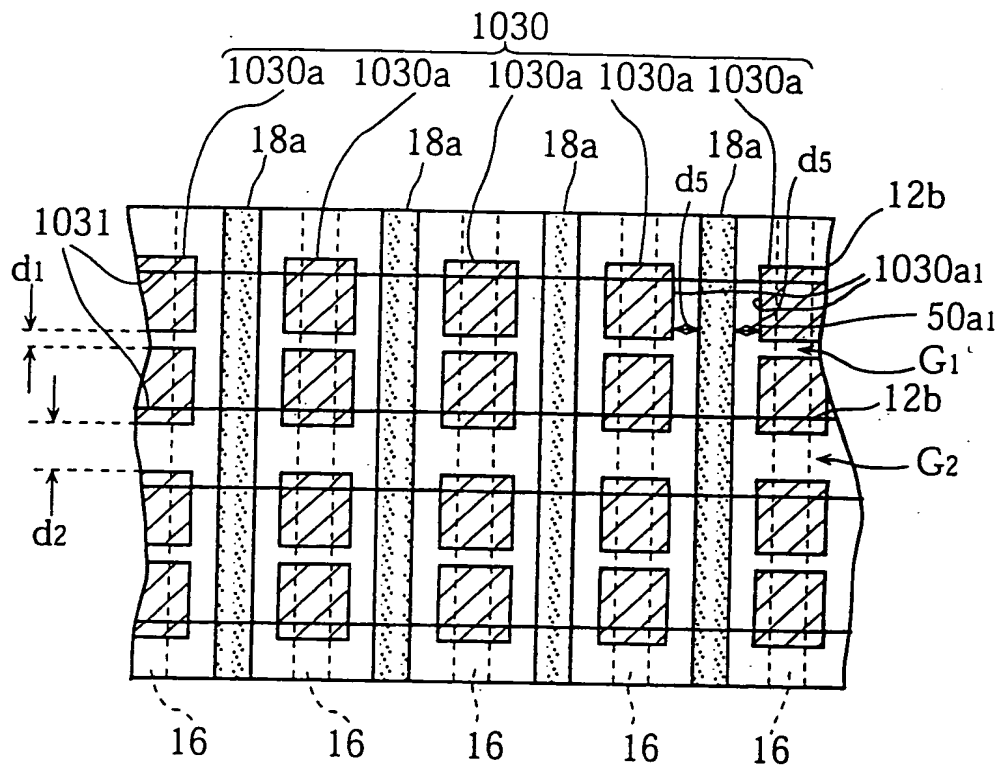
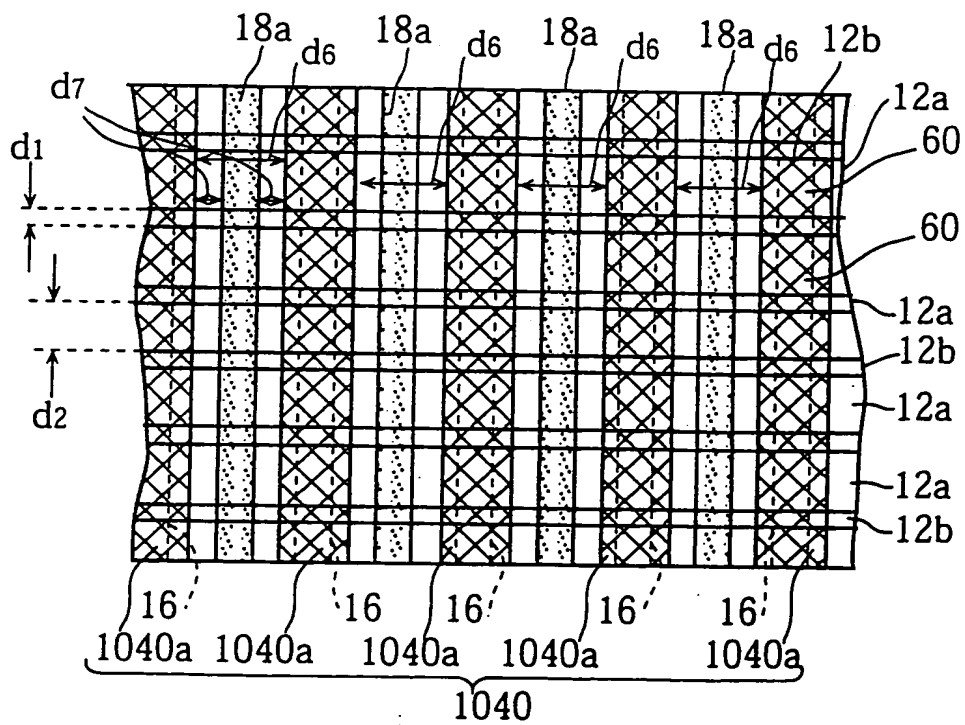


FIG. 36



This cross-sectional diagram illustrates a multi-layered semiconductor device. At the top is a substrate layer labeled 11. Below it are two thin layers, 12a and 12b, which together form part of a stack labeled 12. A thick layer labeled 1050 follows. Beneath this is a series of rectangular protrusions or pillars labeled 18a, which are part of a larger structure 18. These pillars sit on a base layer 19. Below the base layer 19 is another layer 17, which contains small rectangular features. The bottom-most layer is labeled 16. Various dimensions are indicated by dashed lines and arrows: d9 and d8 across the top; d10 across the middle section; d12 across the bottom section; and d11 across the very bottom. Labels 1050b point to specific regions in the upper layers, while labels 1050a point to regions in the lower layers. A bracket on the right side groups layers 12a and 12b under the label 12. Other labels include Bd pointing to a feature on the left, and 20 pointing to a region on the right.

This cross-sectional view shows a substrate 15 with a patterned layer 16 and 17. A layer 18 with openings 18a is positioned above the substrate. A second substrate 20 is positioned below the first substrate, with a layer 13 and a patterned layer 12a/12b. A layer 11 is on top of 12a/12b. Dimensions d13, d14, and d15 are indicated for various features.

FIG. 39

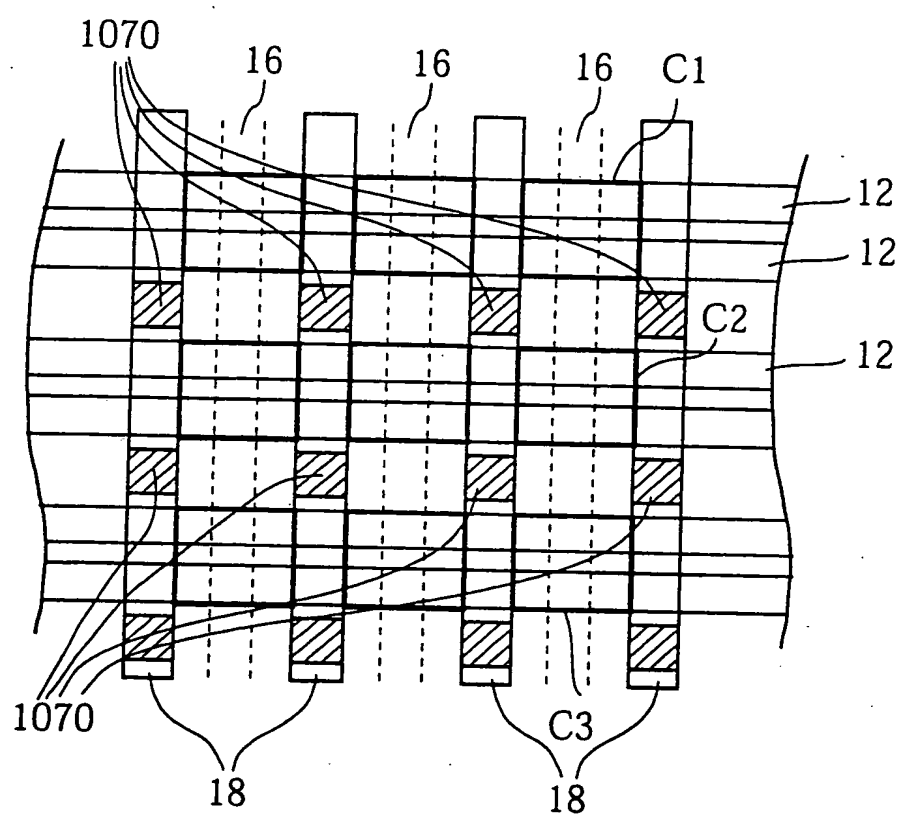




FIG. 40

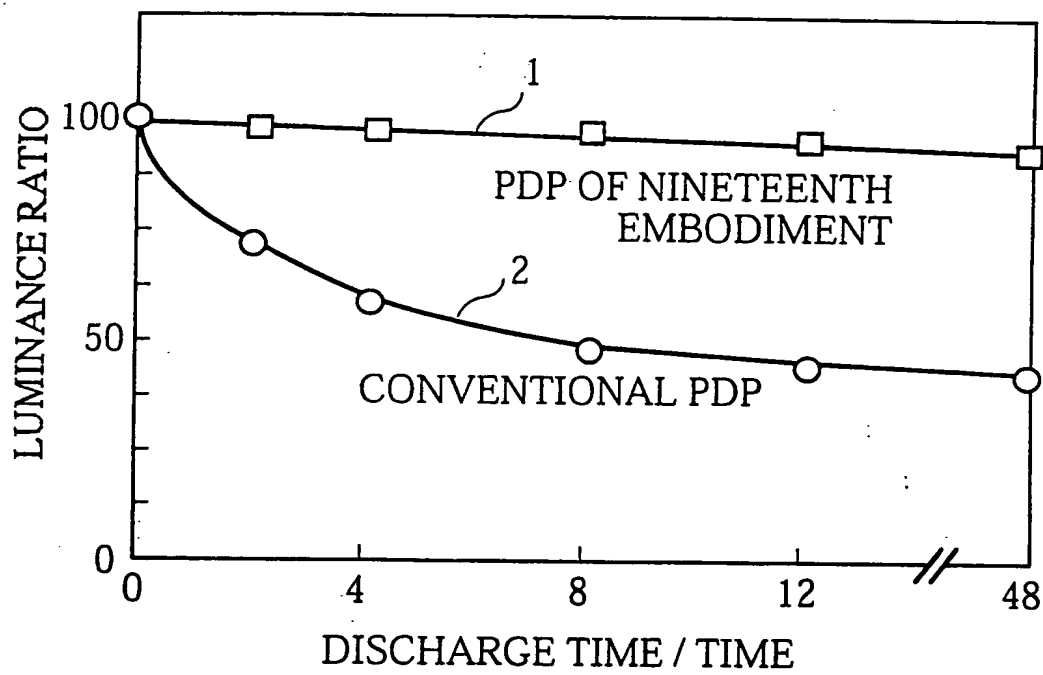


FIG. 41A

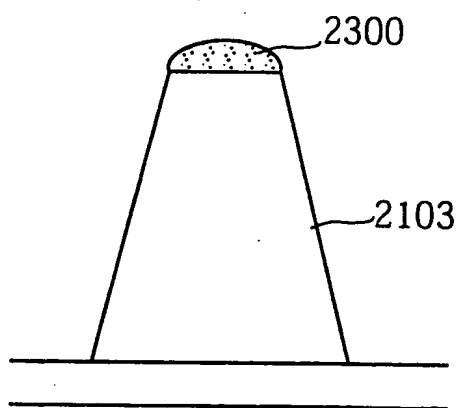


FIG. 41B

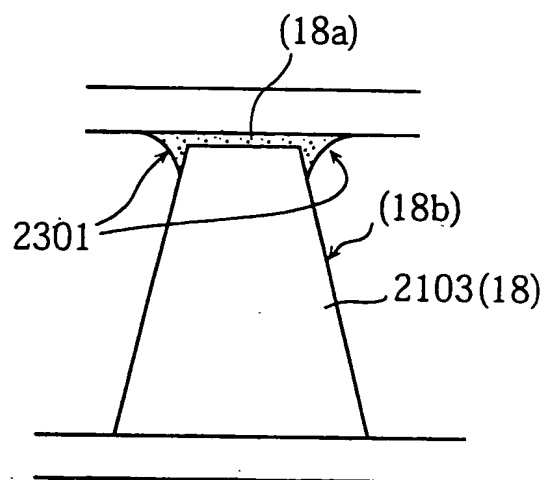


FIG. 42

